SELECTION OF LECTOTYPES AND REDESCRIPTIONS OF THREE CISSEIS (COLEOPTERA: BUPRESTIDAE) SPECIES

SHELLEY BARKER

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Carter (1923) described *C. elliptica* var. *frontalis*, recognised by Obenberger (1935) as a primary homonym of *C. frontalis* Kerremans and replaced with *C. carterella*. Carter (1940) synonymised *C. carteri* Obenberger with *C. elliptica* Carter. Examination of the types and a series of all three taxa shows that they are all good species. Lectotypes of the three species are selected.

S. Barker, Department of Entomology, South Australian Museum, North Terrace, Adelaide, South Australia 5000. Manuscript received 20 November 1997.

MATERIAL

Specimens examined came from the following institutions:

- ANIC Australian National Insect Collection, Canberra.
- AMSA Australian Museum, Sydney.
- NMPC National Museum Prague, Czech Republic.
- NMVA National Museum of Victoria, Melbourne.
- QMBA Queensland Museum, Brisbane.
- SAMA South Australian Museum, Adelaide.

SUB-SPECIES ELEVATED TO SPECIES AND SELECTION OF LECTOTYPES

Obenberger (1935) recognised Cisseis elliptica var. frontalis Carter, 1923 as a primary homonym of Cisseis frontalis Kerremans, 1898 and published the replacement name C. carterella. C. elliptica Carter is an arid zone Western Australian species, while C. carterella is found in mountainous areas in northern Queensland. A comparison of the two forms shows clearly that they are separate species on the basis of differences in morphology, male genitalia (Fig. 1) and distribution.

Carter (1923) described the taxon from two specimens, one from Kuranda, Dodd, in his own collection and the other from Herberton in QMBA. I have located the two syntypes, both are female. One is held by QMBA the other by NMVA. I hereby select the female specimen in QMBA labelled 'Herberton. C. J. Wild. Jan 91. c/2712' as the lectotype of *Cisseis carterella* Obenberger, 1935. Two syntypes of *C. carteri* Obenberger are in NMPC. I hereby select male specimen no. 23769, Yilgarn, Western Australia as the lectotype of *Cisseis carteri* Obenberger, 1933.

Carter (1923) based his description of *Cisseis* elliptica on two specimens collected by H. W. Brown at Cue and Tenindewa. A female specimen labelled '*C. elliptica* Carter, Cue, W.A., H. W. Brown, Cotype', is lodged in the collection of the National Museum of Victoria. I hereby select this specimen as the lectotype of *C. elliptica* Carter.

DESCRIPTION OF SPECIES

Cisseis carterella Obenberger, 1935 (Fig. 1 C)

Cisseis elliptica var. carterella Obenberger, 1935: 846 replacement name for Cisseis elliptica var. frontalis Carter, 1923, homonym of C. frontalis Kerremans, 1898.

Type

Lectotype: \mathcal{D} , Herberton, Jan. 91, C. J. Wild, QMBA; *Paralectotype:* \mathcal{D} , Kuranda, Dodd, NMVA.

Colour

Head, antennae, pronotum, scutellum ventral surface and legs shiny bronze. Elytra dark brown. Hairs white.

Shape and sculpture

Head with deep anterior median fovea; deep punctures becoming shallow posteriorly, most with single emergent seta; interocular width 0.6

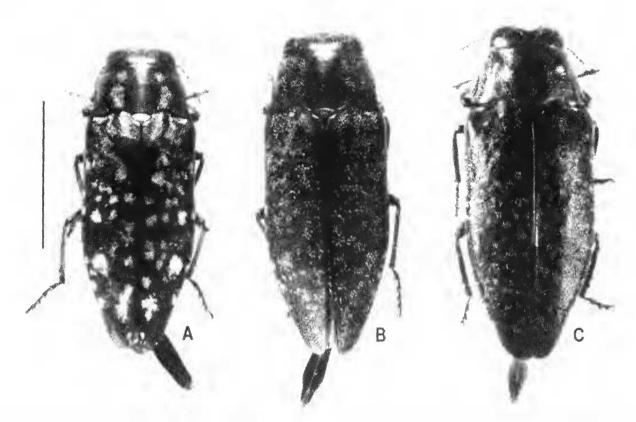


FIGURE 1. Habitus photographs of the following *Cisseis* species. A, *C. carteri* Obenberger. B, *C. elliptica* Carter. C, *C. carterella* Obenberger. Scale bar = 5mm.

head width. Antennae: antennomeres 1-3 obconic: 4-11 toothed. Pronotum: anterior margin projecting medially, basal margin sinuate; medially glabrous with shallow punctures; laterally, most punctures with single emergent seta lying in sinuous striae; dorsal carina diverging from ventral carina at base and then parallel to it, reaching apical margin, space between punctured, most punctures with emergent seta. Scutellum scutiform, laterally elongate at basal margin, glabrous, surface convex with few shallow punctures. Elytra heavily punctate with irregular clumps of hairs mostly in single row widely scattered over the surface; prominent humeral callus, apices rounded, apical margin sub-serrate. Ventral surface shallowly punctured, hairy but less so in the mid-ventral line.

Aedeagus

In *C. elliptica* (Fig. 1 B) the parameters are laterally indented just before apex and have a membranous lateral apical flange. In *C. carterella* (Fig. 1 C) the parameters are rounded laterally to apex without an apical flange.

Size

Males 11.7 x 4.7 mm (10). Females 13.2 x 5.2 mm (5)

Distribution

Queensland: Kuranda, Herberton, Mt Spec, Maryborough.

Cisseis carteri Obenberger, 1924 (Fig. 1 A)

Cisseis carteri Obenberger, 1924: 109. Cisseis elliptica Carter, 1940: 389.

Type

Lectotype: &, NMPC no. 23 769, Yilgarn, W. Australia; *Paralectotype:* &, NMPC no. 23 770, Yilgarn, Western Australia.

Colour

Head coppery-bronze; hairs silver, rounded in males, flattened and broad in females. Antennae coppery-bronze. Pronotum bronze medially, coppery-bronze laterally; hairs flattened and broad in both sexes, in a medial column on each side diverging outwards as a basal elongate mark and a discrete round mark apically, along the upper edge of the dorsal carina and around the angle and the interval between dorsal and ventral carina. Scutellum bronze. Elytra bronze with broad flattened hairs mainly forming a large number of small rounded spots but with a pair of elongate basal marks continuing on from thoracic line. Ventral surface and legs coppery-bronze.

Shape and sculpture

Head closely punctured, hairy, flat without medial fovea, interocular width 0.6 head width. Antennae: antennomeres 1-3 obconic; 4-11 toothed. Pronotum shallowly punctured medially, punctures deeper laterally and arranged in sinuous striae; anterior margin projecting medially, basal margin sinuate; upper carina glabrous and flattened diverging from lower carina at base then more or less parallel to it, diverging just before reaching the apical margin, interval punctured and with flattened hairs. Scutellum scutiform, basal margin convex, expanded laterally, few shallow punctures, glabrous. Elytra punctured below humeral callus and above to the pre-medial area, punctures arranged in sinuous striae, remaining part heavily wrinkled to the apex; rounded at apex; apical margin sub-serrate. Ventral surface with dense flattened hairs laterally, glabrous medially, shallowly punctured.

Size

Males, 11.4 x 4.1 mm (10). Females, 13.6 x 5.0 mm (5).

Aedeagus

Parameres heavily chitinised, more or less parallel-sided.

Distribution

Western Australia: Wurarga, Dedari.

Cisseis elliptica Carter, 1923 (Fig. 1 B)

Cisseis elliptica Carter, 1923: 170.

Type

Lectotype: 2, Cue, W. A., H. W. Brown, NMVA; Paralectotype: 3 Tendindewa, H. W. Brown, AMSA.

Colour

Head bronze, clypeus coppery. Antennae bronze with coppery reflections. Pronotum, scutellum, elytra, ventral surface and legs bronze. Hairs silver.

Sliape and sculpture

Head flat, deep punctures anteriorly, becoming shallow posteriorly each with individual seta, narrow median glabrous line free of punctures on basal half; interocular width 0.7 head width. Antennae: antennomeres 1-3 obconic; 4-11 toothed. Pronotum with shallow punctures, laterally arranged in sinuous striae each with individual seta; apical margin projecting medially, basal margin sinuate; dorsal carina glabrous, diverging from ventral carina basally converging before reaching apical margin, interval punctured, each puncture with an individual seta. Scutellum scutiform, laterally expanded, basal margin convex, punctured. Elytra punctured under and over humeral callus and along suture to middle, remainder wrinkled; small clumps of bifurcate hairs (lower shorter part flat, upper longer and round) forming irregular patterns; apically rounded; apical margin sub-serrate. Ventral surface with shallow punctures each with individual seta.

Size

Males, 11.4 x 4.3 mm (6). Females, 11.8 x 4.5 mm (11).

Aedeagus

Parameres elongate, narrow with a lateral apical flange on each side. Ventral valve excised in males.

Distribution

Western Australia: Cue, Dedari, Tammin, Wurarga, Leonora.

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